

Abstract ID : 300

Title : Availability to Steller sea lions (*Eumetopias jubatus*) of a seasonal prey resource: a pre-spawning aggregation of eulachon (*Thaleichthys pacificus*)

Category : Ecology

Student : Not Applicable

Preferred Format : Oral Presentation

Abstract : The availability of seasonally abundant, energy rich prey can be a significant factor for the survival and reproductive success of predator populations. Large numbers of Steller sea lions (6% of Southeast Alaska population) were attracted to a pre-spawning aggregation of eulachon in Berners Bay in Southeast Alaska during April-May 2002. Sea lion abundance increased as eulachon gathered in Berners Bay, peaked as eulachon abundance peaked, and decreased as the eulachon moved up river. Sea lions consumed up to 20% of the eulachon. The eulachon provided an abundant, energy-rich, predictable prey source for the Steller sea lions: 1) eulachon energy density was 2.21 ± 0.12 kcal g⁻¹, much higher than any forage species reported in the North Pacific except northern lampfish; 2) at least 81 daily energy rations were available per sea lion while the eulachon aggregation was present; and 3) the timing of the spawning run usually begins between late April and early May. The eulachon pulse likely contributes to Steller sea lion breeding success because breeding occurs just after the pulse.